R E P O R T R E S U M E S

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KNOWLEDGE OF ECONOMICS OF ELEVENTH GRADE U.S. HISTORY STUDENTS.

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IN ORDER TO UNDERSTAND FACTORS LEADING TO COMPETENT ECONOMIC KNOWLEDGE OF 11TH-GRADE STUDENTS, A STUDY WAS INITIATED WHICH TRIED (1) TO SHOW GAIN OR LOSS OF ECONOMIC UNDERSTANDING IN THE 11TH-GRADE U.S. HISTORY COURSE, (2) TO ESTABLISH A RELATIONSHIP BETWEEN NUMBER OF RELATED STUDENT COURSES TAKEN AND ECONOMIC LITERACY ACHIEVED, AND (3) TO ESTABLISH A RELATIONSHIP BETWEEN THE ACADEMIC BACKGROUND OF THE TEACHERS AND THE COMPETENCY OF THEIR STUDENTS. AS A REFERENCE, STUDENTS WERE ADMINISTERED PRE- AND POST-TESTS OF ECONOMIC UNDERSTANDING (TEU) AND TEACHERS WERE ASKED TO COMPLETE A BACKGROUND QUESTIONNAIRE. WHILE THERE WAS A GAIN OF ECONOMIC KNOWLEDGE DURING THE 11TH-GRADE U.S. HISTORY COURSE, NO SIGNIFICANT RELATIONSHIPS BETWEEN PREVIOUS RELATED COURSES OR PREVIOUS TEACHING EXPERIENCE OR PREPARATION COULD BE ESTABLISHED. (PM)

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KNOWLEDGE OF ECONOMICS OF ELEVENTH GRADE U.S. HISTORY STUDENTS

COOPERATIVE RESEARCH PROJECT S-179

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Problem

The level of economic literacy attained by high school graduates in the United States has been criticized rigorously in recent years. Estimates suggest that only five per cent of these graduates take a one-semester course in high school economics and only one-fourth of those attending college will take as much as one course.[1] If this trend persists, only ten to fifteen per cent of the current high school enrollment will ever take a course in economics. Critics suggest that economic illiteracy in the United States will persist until a greater portion of the high school population is exposed to a course in economics. The scholarly evidence which is available to support this position is most limited.

The concern over the level of economic competencies attained by the American population emanates from the fact that citizens in a democratic society are continuously faced with making personal and societal decisions. Decison-making in this area has become more complicated as the American economy has become more complex. The contention that taking a course in economics will make a significant contribution to raising the level of economic competencies assumes that (1) the economics course has sufficient time to develop these competencies and (2) most high school students will take the course. Unfortunately, these assumptions are not realistic. The economics course is usually offered during

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[1] G. L. Bach, "Economics in the High Schools: The Responsibility of the Profession," American Economic Review, LI (May, 1961), 579.

the twelfth grade and a significant portion of the nation's youth never reach this level. Furthermore, unless a strong orientation toward economics precedes this course, most of the course time must be utilized to develop a familiarization of terminology.

The economic education program in Florida is based upon the belief that economic competencies can be developed in non-economics courses. Economic concepts have been incorporated in elementary, social studies, business education, industrial arts, home economics, vocational education, and mathematics curricula of the public schools. A course in economics is considered to be the capstone of the economic education program.[2] The current status of this capstone is less than desirable. For example, during the 1962-63 academic year only 34 classes in economics, representing 828 students out of a secondary school population of 501,353 materialized.

The effectiveness of the Florida program in economic education is not known due to the fact that the high school population has not been sampled adequately to determine student competencies in economics. Due to the vital role that economic activity plays in determining the cultural level of the United States, the effectiveness of this program is highly significant to American education and the society which it represents. Therefore, there is a critical need to determine the level of economic literacy which is

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[2]Harold H. Kastner, Jr., "Development of Economic Literacy," Florida School Bulletin, XXVI (September, 1963), 30-35.

attained by high school students prior to the senior year and to ascertain what courses these students and their teachers have taken which may contribute to this literacy.

Objectives

The purpose of this investigation is to determine:

1. The economic understandings of eleventh grade students.
2. If there is any relationship between the number of secondary school courses taken by students in the social studies, business education, home economics, and industrial arts and the level of economic literacy achieved by eleventh grade students.
3. The gain or loss of economic understandings in eleventh grade U.S. history.
4. If the background of U.S. history teachers, such as coursework, degrees held, work experiences, or special workshops and institutes, have a concomitant relationship with the competencies of U.S. history students.

Related Research and Literature

The dynamic nature and the complex development of the American economy have complicated the decision-making processes in our democratic society. Responsible citizenship and personal effectiveness demand that our population acquire a basic understanding of their economic system. This understanding can and needs to be developed in the elementary and secondary school curricula. /Economic Education in the Schools, A Report of the National Task

Force on Economic Education (September, 1961), p. 7; Educational Policies Commission, Education and Economic Well-Being in American Democracy (Washington: National Education Association, 1940), p. 5; Economic Literacy for Americans: A Program for Schools and Citizens, A Statement on National Policy, Research and Policy Committee of the Committee for Economic Development (February, 1962), p. 8; M. L. Frankel, "Education for Economic Challenge." Educating for Economic Competence (Washington: Association for Supervision and Curriculum Development, 1960), p. 1; Proctor Thompson, "Economics and Its Relation to Education," Educational Leadership, XIII (May, 1956), 496; and Lewis E. Wagner "Progress in Closing the Materials Gap in Economic Education," Bulletin of the National Association of Secondary School Principal XXXXVI (March, 1962), 109.]

It has been suggested that one way to attack the problem of economic illiteracy is to have more high school and college students take a course in economics. [G. L. Bach, "Economics in the High Schools: The Responsibility of the Profession," American Economic Review, LI (May, 1961) 579; Edwin G. Nourse, "What Would Economic Literacy be Like?" Challenge, XII (March, 1964), 5; and Howard S. Ellis, "This is Economics," American Economic Review, LI (March, 1961), 577.] However, many students never have an opportunity to take such a course. For example, some become early drop-outs and others have crowded programs which do not permit such electives. Consequently, efforts to raise the level of economic literacy must be started in the earlier grades. [Max G. Cooley, "Develop an Economic Course

for Prospective Teachers." The Balance Sheet, XLIV (April, 1963), 355; Division, Teaching Economic Understandings in Business Courses (Sacramento, California: California State Department of Education, September, 1962) p. 1; Bert Hamilton, "Economic Education: A Blind Spot," Peabody Journal of Education, XXXIX (March, 1962), 272; Wilhelmina Hill, "Major Concerns About the Social Studies," National Elementary Principal, XLII (May, 1963), 42; Harold H. Kastner, Jr., "Development of Economic Literacy," Florida School Bulletin, XXVI (September, 1963), 35; and Lawrence Senesh, "The Organic Curriculum: A New Experiment in Economic Education," The Councilor, XXI (March, 1960), 45.7

Procedure

It was decided that the objectives of this study would be realized by examining a random sample of eleventh grade U.S. History teachers and their students. Teachers and students in this course were chosen because: (1) the U.S. History course is a part of the economic education program and is a required course for all students who reach this grade level, and (2) courses in economics in the Florida school curriculum are offered at the twelfth grade level and, therefore, student experiences will come from non-economics courses.

A. Sample

A random sample of approximately forty teachers was drawn from a population of eleventh grade U.S. History teachers who were listed in the 1962-63 Florida print-out and who were expected to teach at least three classes of U.S. History in the 1964-65 academic year. The "three-class"

stipulation was made to insure that the sample included teachers with approximately one-half of their teaching load in the U.S. History area.

The sample was further confined to teachers who were employed in county systems which have at least ten teachers who meet the teaching load qualifications specified above. This requirement anticipated follow-up research projects, depending upon the results of this investigation, which would involve a minimum of ten teachers in a given geographic location. Each teacher in the population was assigned a number and a table of random numbers was utilized to identify the project sample.

One class of U.S. History students per teacher was chosen for the student sample. This class was identified as the first U.S. History class in the teacher's daily schedule. In view of the three-class stipulation for the sample, this class could range from the first to the fourth period of the day.

B. Test and Survey Instruments

The SRA Test of Economic Understanding, Edition No. 2, Form A and Otis Quick Scoring Mental Ability Tests, Gamma Test: Form AM were the two tests utilized in this study. The Test of Economic Understanding (hereafter referred to as TEU) was considered appropriate in view

of the fact that approximately fifty percent of the questions are oriented towards the economic understandings which are usually covered in the eleventh grade U.S. History course. It is also one of the few tests currently available which might be utilized to measure the level of understandings of students at this level. Form A was chosen for its sensitiveness to change.

A "Coordinator's Manual" (see Appendix A), a "Teacher questionnaire (see Appendix D), and a "Student Questionnaire" (see Appendix C) were developed by the investigators. The first drafts of the teacher and student questionnaires were revised after they were administered to an experimental group of students and teachers. Mark sense cards were utilized for answers to all instruments except the Otis tests. Answer sheets which could be scored on the IBM 1230 were utilized for this instrument.

Personnel responsible for coordinating the administration of the study instruments were identified at the county school district level. (see Appendix E). The teachers and students were not told the total purpose of the study. Neither were told that a post-test would be given to measure any changes in economic understanding which might occur during the year.

C. Administration of Instruments and Organizing Results

The pretest TEU, the Teacher Questionnaire, and the Student Questionnaire were administered during the week

of September 14-18, 1964. The Otis test was administered between October 19-21, 1964, and the post-test TEU, was re-administered between May 17-19, 1965.

Item analyses of data gathered in September were utilized for further planning concerning the project. This information was utilized by the research team to finalize the use that was made of the data processing equipment. Programs were written during the months of March and April, 1965.

All data were gathered in card form by June 15, 1965. Cards were then sorted to determine the final study sample. Each student had to have a set of four cards to be considered valid for this analysis.

ANALYSIS OF THE DATA AND FINDINGS

TABLE 1

Total Group Performance on the TEU

Mean Pre-test Raw Score	19.45	s.d. 6.00
Mean Post-test Raw Score	22.01	s.d. 6.68
Mean Difference Score	2.55	s.d. 5.14

As shown in table one, the mean pre-test raw score on the TEU, for the total group of 656 students, is 19.45 with a standard deviation of 6.68. The mean of the post-test minus pre-test raw score was 2.55 and yields a standard deviation of 5.14. The mean of the difference scores is significant at the .01 level and the correlation between pre-test and post-test scores is .68.

TABLE 2

All Negro Performance on TEU*

Mean Pre-test Raw Score	14.36	s.d. 4.63
Mean Post-test Raw Score	16.76	s.d. 5.44
Mean Difference Score	2.4	s.d. 4.73

*See Appendix C for questionnaire generating student information.

Table two displays information related to the 55 Negro students' performance on the TEU. Pre-test scores yield a mean of 14.36 and a standard deviation of 4.63. The mean post-test score is 16.76 with a standard deviation of 5.44. The mean of the difference scores, 2.4, is significant at the .05 level with a .57 correlation between pre and post-test scores.

TABLE 3

All Caucasian Group Performance on the TEU

Mean Pre-test Raw Score	20.01	s.d. 5.94
Mean Post-test Raw Score	22.62	s.d. 6.60
Mean Difference Score	2.61	s.d. 5.20

For the Caucasian student group of 579, the mean pre-test score is 20.01 and the post-test score is 22.62. The standard deviations for the pre-test and post-test are 5.94 and 6.60 respectively. The mean of the difference scores is 2.61 with a standard deviation of 5.20. The mean of the difference scores is significant at the .01 level, with a correlation of .66 between the pre and post-test scores.

TABLE 4

All Male Group Performance on the TEU

Mean Pre-test Raw Score	19.94	s.d. 6.04
Mean Post-test Raw Score	22.28	s.d. 6.78
Mean Difference Score	2.34	s.d. 5.01

Table four shows that the all male group of 343 students has a mean pre-test raw score of 19.94 with a standard deviation of 6.04. On the post-test this group has a mean score of 22.28 and a standard deviation of 6.78. The mean of difference scores, 2.34, has a standard deviation of 5.01 and is significant at the .01 level. There is a correlation between pre and post-test scores of .70.

TABLE 5

All Female Group Performance on the TEU

Mean Pre-test Raw Score	18.93	s.d. 5.93
Mean Post-test Raw Score	21.70	s.d. 6.59
Mean Difference Score	2.77	s.d. 5.30

The all male group, table five, of 313 students has a mean pre-test score of 18.93 and a standard deviation of 5.93. The mean post-test score of 21.70 yields a standard deviation of 6.59. The mean of the scores is 2.77 with a standard deviation of 5.30 with a significance level of .01. This group has a correlation between pre and post-test scores of .65.

For the purpose of analysis, subjects are assigned to one of three groups according to differences in pre and post-test scores. Those subjects whose change in score is more than one standard deviation above the mean for the total group are classified as "high", those whose change in score is more than one standard deviation below the mean of the total group are classified as "low". All other subjects are placed in the "average" classification. This manner of classification is chosen over other possibilities in an effort to avoid the occurrence of

blank cells in the application of chi-square analysis.

The data collected from the student questionnaires is applied to 13 specific relationship questions or hypotheses with the following results.

Hypothesis I. There is no relationship between the last social studies course taken and a change in score on the TEU.

TABLE 6

Student Performance on the TEU According to the Last Social Studies Course Taken

	US HIST	WORLD HIST	CIVICS	GEOG	ALL OTHERS
High	14	46	27	1	2
Average	42	264	138	18	15
Low	13	48	24	3	4

x^2= 7.63, with eight degrees of freedom and a probability of .55 under the null hypothesis. Thus, Hypothesis I can not be rejected.

Hypothesis II. There is no relationship between the number of prior social studies courses taken and a change in score on the TEU.

TABLE 7

Student Performance on the TEU and the Number of Prior Social Studies Courses Taken

	0-1	2	3	4	5 or more
High	17	23	24	22	4
Average	61	104	155	126	31
Low	15	17	32	18	7

x^2 = 6.63, with eight degrees of freedom and a probability under

the null hypothesis of about .6. Hence, Hypothesis II can not be rejected.

Hypothesis III. There is no relationship between the number of semester hours taken in the area of consumer economics and a change in score on the TEU. By inspection, there is obviously no relationship, i.e. the frequencies for the High and Low groups are equal. No statistical analysis is warranted and Hypothesis III can not be rejected.

Hypothesis IV. There is no relationship between the number of semester hours taken in the area of business education and a change in score on the TEU. As in the case of Hypothesis III, Hypothesis IV can not be rejected.

Hypothesis V. There is no relationship between the number of semester hours taken in the area of home economics and a change in score on the TEU.

TABLE 8

Student Performance on the TEU and the Number of Semester Hours Taken in Home Economics

	1	2	3	4	5-10
High	1	25	5	7	7
Average	11	10	14	51	20
Low	1	21	3	11	5

$x^2 = 48.54$ with eight degrees of freedom and significance at the .05 level. This hypothesis, V, can be rejected. (This hypothesis relates exclusively to the female portion of the student sample.)

Hypothesis VI. There is no relationship between the number of semester hours taken in the area of industrial arts and change in the score on the TEU.

TABLE 9

Student Performance on the TEU and the Number of Semester Hours Taken in Industrial Arts

	2/3 - 1	1 2/3 - 2	2 2/3 - 4	more than 4
High	12	12	6	4
Average	42	69	39	10
Low	15	8	10	2

$x^2 = 8.28$ with six degrees of freedom and is not significant at the .05 level. Hypothesis VI can not be rejected. (This hypothesis relates exclusively to the male portion of the student sample.)

Hypothesis VII. There is no relationship between selected courses taken concomitantly with the 11th grade U.S. History course and a change in score on the TEU.

TABLE 10

Student Performance on the TEU and Selected Courses Taken Concomitantly With the US History Course

	World Hist Geog Amer Govt Prob of Democ	Con Econ Bus ED Econ	H Econ Ind Arts
High	8	3	13
Average	41	41	85
Low	12	10	19

$x^2 = 2.33$ with four degrees of freedom is not significant at the .05 level indicates that Hypothesis VII can not be rejected.

Hypothesis VIII. There is no relationship between the amount of paid employment and a change in score on the TEU.

TABLE 11

Student Performance on the TEU and the Amount of Time Spent in Paid Work Experience

	None	Part-time	Full-time	Both Part & Full-time
High	29	35	6	6
Average	155	195	22	74
Low	22	49	2	11

$x^2 = 11.21$ with six degrees of freedom in not significant at the .05 level. Hypothesis VIII can not be rejected.

Hypothesis IX. There is no relationship between the amount of unpaid work experience and a change in score on the TEU.

TABLE 12

Student Performance on the TEU and the Amount of Time Spent in Unpaid Work Experience

	0-10	11-20	21-30	31-39	40 or more
High	25	16	2	4	15
Average	117	53	28	31	82
Low	28	13	7	1	13

$x^2 = 11.03$ with eight degrees of freedom is not significant at the .05 level of significance. Hypothesis IX can not be rejected.

Hypothesis X. There is no relationship between the occupational classification of the male guardian and a change in score on the TEU.

TABLE 13

Student Performance on the TEU and Male Guardian Occupational Classification

	Prof-Manag	Sales	Skilled	Semi-Skilled	Unskilled
High	30	6	34	9	2
Average	144	69	162	40	9
Low	40	11	24	9	5

$x^2 = 13.20$ with eight degrees of freedom is not significant at the .05 level of significance. Hypothesis X can not be rejected.

Hypothesis XI. There is no relationship between the occupational classification of the female guardian and a change in score on the TEU.

TABLE 14

Student Performance on the TEU and Female Guardian Occupational Classification

	Prof-Manag	Sales	Skilled	Semi-Skilled	Unskilled
High	5	5	18	8	3
Average	58	35	72	22	16
Low	11	3	13	9	3

$x^2 = 11.40$ with eight degrees of freedom is not significant at the .05 level of significance. Hypothesis XI can not be rejected.

Hypothesis XII. There is no relationship between the number of years of formal education of the male guardian and a change in score on the TEU.

TABLE 15

Student Performance on the TEU and Years of Formal Education of the Male Guardian

	0-5	6-8	9-11	12	13-15	16	17 or more
High	2	13	9	27	7	6	7
Average	9	51	82	141	60	34	28
Low	3	14	7	17	14	11	8

$x^2 = 18.53$ with 12 degrees of freedom is not significant at the .05 level of significance. Hypothesis XII can not be rejected.

Hypothesis XIII. There is no relationship between the number of years of formal education of the female guardian and a change in score on the TEU.

TABLE 16

Student Performance on the TEU and Years of Formal Education of the Female Guardian

	0-8	9-11	12	13 or more
High	8	16	35	1
Average	50	90	182	34
Low	6	15	35	9

$x^2 = 6.97$ with six degrees of freedom is not significant at the .05 level of significance. Hypothesis XIII can not be rejected.

Organizing the student and the teacher data for examination suggested the elimination of teachers whose classes were smaller than 17 students. The classes eliminated include no more than ten students who were present during the administration of the measuring and information instruments. By far the largest group is eliminated as a result of absence and the delayed administration of the instruments would have been antithetical to the study.

As a result of shrinkage, the total teacher population is reduced to 26 classes, each having 17 or more students enrolled and for whom all of the data is present. The mean of the distribution of gain scores for these students is 2.9, with a standard deviation of 1.1. This distribution corresponds to a theoretical sampling distribution of mean gain scores; hence, classes with mean scores greater than 2.9 plus 1.1 are classified as high achieving classes and those classes with mean gains of 2.9 minus 1.1 are classified as low achieving classes.

By numbers of classes, this method of separation yields six high, sixteen average and four low achievement classes. The responses of ten teachers (six high and four low) are analyzed to determine whether patterns exist. Because of the small sample, no tests of significance would be meaningful. Therefore, "results" relating to the fourth objective of the study are suggestive and are apparent patterns which result from inspections.*

Apparent Pattern I. There is no apparent pattern when comparing student TEU score changes of high and low achievement groups with the number of years of teaching experience of the related teachers.

Apparent Pattern II. There is no apparent pattern when relating student TEU score changes of high and low achievement groups with the number of years the teachers taught with a social studies teaching load weighted with one-half or more of the courses in the area of the social studies.

*See Appendix D for questionnaire generating teacher information.

Apparent Pattern III. There is no apparent pattern when comparing student TEU score changes of the high and low achievement groups with the number of semester hours of formal course work completed in the following social science areas: economics, geography, history, political science, psychology and sociology.

Apparent Pattern IV. There is no apparent pattern when comparing student TEU score changes of high and low achievement groups with the total of semester hours teachers completed in the area of the social sciences.

Conclusions and Implications

1. Economic understandings are being taught, in the state of Florida, through the 11th grade U.S. history course. While the mean gain is statistically significant, the raw results appear to be disappointing when related to possible coverage of economic understandings in the 11th grade U.S. History course. Since the TEU does attempt to measure many of the understandings developed or available for development in this course, there would appear to be a sizeable gap between potential and realized results in the teaching of economic understandings.

2. There is no discernible pattern of social studies courses and social studies related courses which lead to greater acceptance of economic understandings. The one exception to this generalization in this study is the home economics course. However, close inspection of the data reveals

that there is an inverse relationship between high and low achievement scores on the TEU and the number of home economics hours taken.

3. While the comparison of TEU mean score change according to race shows the Caucasian group with higher raw scores, the mean score gain for each group is very nearly the same.

4. A comparison of the TEU mean score change according to sex shows that the female gains exceed male gains; male performance on the TEU, however, exceeded female performance on both the pre and post-test, with the males evidencing slightly greater in-group stability.

5. There is no relationship between work experience, or the absence of work experience, and score change on the TEU.

6. There is no relationship between the educational-economic factors developed in this study and score change on the TEU.

7. There are no apparent relationships between teacher preparation, teaching experiences and student score change on the TEU.

The limited nature of this study and the generalizations that are generated point up the need for an expanded sample and expanded geographic coverage. Such an expansion would allow the researcher to delve more assiduously in the area of relationships between student performance and teacher preparation. We have no indication from this study, because no teachers were involved, as to the effectiveness of the development of economic concepts through work-

shops, television classes, local seminars and a host of efforts to expose teachers to more effective ways to handle economic material. An expanded study might also include an analysis of the materials treated in the 11th grade U.S. History texts in an effort to determine whether there are variations in the treatment of economic material and if there are situations where one variation is more effective than others.

In summary, this study indicates that students increase their economic understandings while enrolled in the 11th grade U.S. History course. Although the mean gain in economic understandings is statistically significant, the size of the real gain suggests that the students in this study added little to their store of economic understandings.

Appendix A

COORDINATOR'S MANUAL

For

Research Project S-179

"Knowledge of Economics of Eleventh Grade

U. S. History Students"

Research Project S-179

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COORDINATOR'S MANUAL

You have been asked to administer Student Questionnaire S-179, Teacher Questionnaire S-179, and Test of Economic Understandings in conjunction with a Research Project dealing with the economic understandings of a sample of eleventh-grade U. S. History students and the general background of their teachers. The Teacher Questionnaire S-179 should be completed by teachers while students are completing Student Questionnaire S-179 and Test of Economic Understandings.

Teacher's Part

Teacher Questionnaire S-179

The teacher questionnaire should require no explanation on the part of the Coordinator. Ask the teachers to complete the information at the top of the page, read the questionnaire carefully, and have them provide the answers as accurately as possible. The teacher identification number will be provided by this office.

You are requested not to tell the teacher any more about this Project than is absolutely necessary for securing teacher cooperation. We are anxious not to interfere with the teacher's normal presentation of course content.

Students' Part

Student Questionnaire S-179 should be completed before the students take the Test of Economic Understanding. The answers to both of these instruments are to be recorded on special answer cards with electrographic pencils. Answer cards and pencils should be distributed at the same time the instruments are given to the students. Only one class of U. S. History students per teacher will be given the Student questionnaire and the economics test. This class should be the first U. S. History class in the teacher's daily schedule.

Student identification numbers should be designated prior to the Coordinator's appearance before the students. The first two digits of the student identification numbers will be the first two digits of their teacher's identification number. The second two digits of the student identification number will be assigned, 1-99, according to the number of students in the class. (Should a class have more than 99 students the Coordinator should call the Project Director, collect, at Area code (305), 222-2900, extension 249, for additional instructions.) For example, the fifth student identified with teacher "0500" will have the number, "0505". Identification numbers are to be placed on the questionnaire and the back of the two answer cards.

Instructions for Administering Questionnaire

After distributing Student Questionnaire S-179, special pencils, and answer cards allocate identification numbers and read the following to the students.

"The questionnaire you have just received is designed to obtain information concerning your background. Print your complete name, last, first, and middle and your identification number in the spaces provided at the top of the first page of your questionnaire and wait for further instructions."

(Wait one (1) minute and then read)

"The front of the answer card begins with answer number one (1) and has "Florida State Department of Education, Tallahassee, Florida," printed in the center section. Place your answer card on your desk so that the back of the card is facing you. Now turn the card so that the four columns of numbers zero (0) to nine (9) are upright. You have been given a four-digit identification number. Using the special pencil you have been provided, darken the four spaces which represent your identification number. For example, if your number were "0505" you would darken the space above "0" in the "thousands" column, the space above "5" in the "hundreds" column, the space above "0" in the "tens" column, and the space above "5" in the "units" column. When you have finished this step, wait for further instructions."

(Wait one (1) minute and then read)

"Look at paragraph three of the instructions which are provided on the front page of the questionnaire. Read this silently as I read it aloud. Look at the multiple answer section of the answer card. There are fifty (50) numbers with five (5) spaces for each number. The spaces of numbers 1-50 will be utilized to record your answers to the items listed on this questionnaire. Some answers will require you to blacken only one space per number on the answer card;

others will require you to blacken several spaces. Some questions will not be applicable to your background. When this is the case you should leave the spaces blank.

Read this questionnaire carefully and use the special pencil to blacken the appropriate spaces which answer the following questions. Be careful when marking your answer card not to make any stray pencil marks. This card will be tabulated electronically and stray marks will be recorded as answers. If you care to change an answer, erase the wrong answer carefully and then mark the desired answer. You now have ten minutes to complete this questionnaire. Begin."

Coordinators should wait ten minutes and then ask the students to pass their questionnaires and answer cards forward. Pencils should not be returned since they will be needed for the test which follows.

Instructions for Administering Test of Economic Understanding

First, distribute a test booklet of Test of Economic Understanding and one answer card to each student. Instruct the students "Do not open your test booklet until you are told to do so."

Next, tell them:

"Turn your answer card face down on your desk and turn it so that the four columns of numbers from zero (0) to nine (9) are upright. Place your identification number in the appropriate spaces as you did on your questionnaire card. When you have finished, wait for further instructions.

(Wait one (1) minute and then read)

"You are about to take a test designed to measure your understanding of economics. Not all students will have taken a formal course in economics, but most have learned something about the subject in their regular courses, through reading, listening to the radio, or watching television. These questions will measure how well you understand the principles of economics and the way our economy operates. It is possible that you will not know the answers to some questions. However, you should answer every question by marking what you think is the best choice, using the information you do have in selecting your answer. Work at a comfortable speed, but do not spend too much time on any one item.

This test consists of fifty questions or incomplete statements, for each of which you are to choose the one best answer. Even though in some instances more than one answer may appear to be correct, your task is to choose the best answer. After you have read the question and chosen your answer, use the special pencil you have been given to blacken the appropriate space on the answer card. Do not mark the test booklet.

"Now turn to page 5 of the test booklet. There are four answers from which you are to make one selection. Consequently, you will need to use only the first four spaces of each number on the answer card.

"You may now begin. You have forty minutes in which to take this test. I will tell you when there are ten minutes remaining."

The Coordinator should tell the students when there are ten minutes remaining. At the end of forty minutes, ask the students to pass the test booklets, answer cards, and pencils forward. Please exercise care not to mix the answer cards of the questionnaire with those of the test.

Appendix B

COORDINATOR'S MANUAL FOR RESEARCH PROJECT S-179

Second Administration of Test of Economic Understanding

Instructions for Administering Test of Economic Understanding

The same identification numbers which were given to your students in September should be utilized again for this Test.

First, distribute a test booklet of Test of Economic Understanding and one answer card to each student. Instruct the students "Do not open your test booklet until you are told to do so."

Next, tell them:

"The front of the answer card begins with answer number one (1) and has "Florida State Department of Education, Tallahassee, Florida," printed in the center section. Place your answer card on your desk so that the back of the card is facing you. Now turn the card so that the four columns of numbers zero (0) to nine (9) are upright. You have been given a four-digit identification number. Using the special pencil you have been provided, darken the four spaces which represent your identification number. For example, if your number were "0505" you would darken the space above "0" in the "thousands" column, the space above "5" in the "hundreds" column, the space above "0" in the "tens" column, and the space above "5" in the "units" column. When you have finished this step, wait for further instructions."

(Wait one (1) minute and then read)

"You are about to take a test designed to measure your understanding of economics. Not all students will have taken a formal course in economics, but most have learned something about the subject in their regular courses, through reading, listening to the radio, or watching television. These questions will measure how well you understand the principles of economics and the way our economy operates. It is possible that you will not know the answers to some

questions. However, you should answer every question by marking what you think is the best choice, using the information you do have in selecting your answer. Work at a comfortable speed, but do not spend too much time on any one item.

This test consists of fifty questions or incomplete statements, for each of which you are to choose the one best answer. Even though in some instances more than one answer may appear to be correct, your task is to choose the best answer. After you have read the question and chosen your answer, use the special pencil you have been given to blacken the appropriate space on the answer card. Do not mark the test booklet.

"Now turn to page 5 of the test booklet. There are four answers from which you are to make one selection. Consequently, you will need to use only the first four spaces of each number on the answer card.

"You may now begin. You have forty minutes in which to take this test. I will tell you when there are ten minutes remaining."

The Coordinator should tell the students when there are ten minutes remaining. At the end of forty minutes, ask the students to pass the test booklets, answer cards, and pencils forward.

Appendix C

STUDENT QUESTIONNAIRE S-179

Name _____ Identification number _____
Last First Middle

INSTRUCTIONS

Your identification number will be given to you by the coordinator who is distributing this questionnaire. Please print your name and identification number in the spaces provided at the top of this page.

When you receive this questionnaire you will also be given an answer card and a pencil with special lead. Follow the verbal instructions given by your coordinator and use the special pencil to record your identification number on the card.

Look at the multiple answer section of the answer card. There are fifty (50) numbers with five (5) spaces for each number. The spaces of numbers 1 - 50 will be utilized to record your answers to the items listed on this questionnaire. Some answers will require you to blacken several spaces. Some questions will not be applicable to your background. When this is the case you should leave the spaces blank.

Read this questionnaire carefully and use the special pencil to blacken the appropriate spaces which answer the following questions. Be careful when marking your answer card not to make any stray pencil marks. This card will be tabulated electronically and stray marks will be recorded as answers. If you care to change an answer, erase the wrong answer carefully and then mark the desired answer.

A. Your sex is 1A-Male 1B-Female

B. Your race is 2F-Caucasoid 2G-Negroid 2H-Mongoloid

C. Your current school classification is

3A-Sophomore 3B-Junior 3C-Senior

D. Prior to this year, in what grade did you have your last social studies course?

4F-Eight (8) 4G-Nine (9) 4H-Ten (10) 4J-Eleven (11) 4K-Twelve (12

E. Which of the following social studies courses did you take that year?

5A-American History 6F-World History 7A-Civics

8F-Government 9A-Economics(not consumer) 10F-Florida History

11A-Geography 12F-Other social Studies courses

F. Which, if any, of the following non-social studies courses did you take during that same year?

13A-Industrial Arts 14F-Consumer Economics 15A-Home Economics

16F-Business(other than typing, shorthand, business machines, or consumer economics)

G. Which of the following social studies courses have you taken, prior to this year, in the secondary school program (grades 7-12)?

17A-American History 18F-World History 19A-Civics 20F-Geography

21A-U.S. Government 22F-Florida History 23A-Florida Government

24F-Economics (other than consumer) 25A-Other social studies course(s)

H. Prior to this year, how many semesters of consumer economics have you taken in the secondary school program (grades 7-12)?

26F-None 26G-1 sem. 26H-2 sem. 26J-3 sem. 26K-4 sem.

I. If you have taken any course(s) in business education in the secondary school program (other than typing, short hand, business machines, or consumer economics), how many semesters have you taken?

27A-1 sem. 27B-2 sem. 27C-3 sem. 27D-4 sem. 27E-5 sem.

28F-6 sem. 28G-7 sem. 28H-8 sem. 28J-9 sem. 28K-10 sem. or more

J. If you have taken any course(s) in home economics in the secondary school program (grades 7-12) how many semesters have you taken?

29A-1 sem. 29B-2 sem. 29C-3 sem. 29D-4 sem. 29E-5 sem.

30F-6 sem. 30G-7 sem. 30H-8 sem. 30J-9 sem. 30K-10 sem. or more

K. If you have taken any course (s) in industrial arts in the secondary school program (grades 7-12), how many semesters have you taken?

31A-2/3 (12 weeks) 31B-1 sem. 31C-1 2/3 sem. 31D- 2 sem. 31E-2 2/3 sem.

32F-3 sem. 32G-3 2/3 sem. 32H-4 sem. 32J-4 2/3 sem. 32K-5 sem.

33A-5 2/3 sem. 33B-6 sem. 33C-6 2/3 sem. 33D-7 sem. 33E-7 2/3 sem. or more

L. What kind of work experience, other than domestic chores performed for your own household, have you ever had in which you were paid for your services? (Mark only one)

34F-None 34G-Part-time 34H-Full-time 34J-Both part and full-time

M. If you have been employed in other than domestic chores for your own household, regardless of whether or not you were paid, what was the maximum number of hours per week worked? (This may range from voluntary services performed in hospitals to regular employment).

35A-0-10 hrs. 35B-11-20 hrs. 35C-21-30 hrs. 35D-31-39 hrs. 35E-40 hrs. or more

N. Which of the following courses are you taking this year in addition to eleventh grade American History?

36F-World History 37A-Geography 38F-American Government

39A-Problems of Democracy or equivalent 40F-Consumer Economics

41A-Business Education(other than shorthand, typing, business machines, or consumer economics)
42F-Home Economics 43A-Economics (not Consumer) 44F-Industrial Arts

O. Which one of the following classifications describes the occupation of your father or male guardian when he is working?

45A-Professional and managerial--these are occupations which require a formal education in well-organized fields of knowledge or a great deal of knowledge or creative talent and skill acquired through experience. Examples are:

architect	clergyman	dentist	lawyer	hotel manager
artist	teacher	physician	judge	restaurant manager
author	editor	pharmacist	draftsman	retail buyer
reporter	chemist	nurse	customs officer	accountant
photographer	engineer	farm owner	military officer	auditor

45B-Sales--these are occupations which involve the sale of a good or service to a buyer and which usually require a training program offered by the employer. High school education is usually a requisite. Examples of items sold are:

insurance	groceries	produce	ice cream
stocks	cosmetics	automobiles	hardware
television sets	pharmaceutical	clothes	newspapers
magazines	advertising	pianos	beverages

45C-Skilled--these occupations require a thorough knowledge of processes, the use of independent judgment, and often involve a high degree of manual dexterity. Skills may be learned through either formal education or an extended apprenticeship. Examples are:

auto mechanic	carpenter	detective	military (non-officer)	watch repairman
welder	type setter	policeman	sheet-metal worker	woodworker
pipe fitter	brick layer	barber	machinist	locomotive engineer
electrician	jeweler	chef	bookkeeper	miller
die maker	baker	fireman	legal secretary	tailor

45D-Semi-skilled--these occupations involving simple, repetitive, and routine jobs which can be learned in a day and mastered in a few weeks. Examples are:

hotel clerk	machine operator	waiter	milkman
ship's steward	hospital attendant	mill-worker	gasoline station attendant
elevator operator	baliff	receiving clerk	packer
truck driver	fisherman	watchman	lineman
switchman	nurseryman	carrier	chauffeur

45E-Unskilled--these are occupations which involve manual operations and which require no special training. Examples are:

bellman	ditch digger	bean picker	deckhand
janitor	stevedore	miner	garbage collector
farm hand	yardman	lumberman	ticket taker
porters			

P. Which one of the following classifications describes the occupation of your mother or female guardian if she works other than as a housewife in your place of dwelling?

46F-Professional and managerial--these are occupations which require a formal education in well-organized fields of knowledge or a great deal of knowledge or creative talent and skill acquired through experience. Examples are:

architect	clergyman	dentist	lawyer	hotel manager
artist	teacher	physician	judge	restaurant manager
author	editor	pharmacist	draftsman	retail buyer
reporter	chemist	nurse	customs officer	accountant
photographer	engineer	farm owner	military officer	auditor

46G-Sales--these are occupations which involve the sale of a good or service to a buyer and which usually require a training program offered by the employer. High school education is usually a requisite. Examples of items sold are:

insurance	groceries	produce	ice cream
stocks	cosmetics	automobiles	hardware
television sets	pharmaceutical	clothes	newspapers
magazines	advertising	pianos	beverages

46H-Skilled--these occupations require a thorough knowledge of processes, the use of independent judgment, and often involve a high degree of manual dexterity. Skills may be learned through either formal education or an extended apprenticeship. Examples are:

electrician	telegraph operator	chef	legal secretary
beautician	stenographer	bookkeeper	watch repairwoman
policewoman	baker	jeweler	seamstress
painter			

46J-Semi-skilled--these occupations involving simple, repetitive, and routine jobs which can be learned in a day and mastered in a few weeks. Examples are:

telephone operator	waitress	gasoline station attendant
manicurist	short-order cook	elevator operator
truck driver	hotel clerk	shipping clerk
mill worker	hospital attendant	produce packer

46K-Unskilled--these occupations which involve manual operations and which require no special training. Examples are:

charwoman	farm hand
laundry worker	ticket taker
motel maid	

Q. How many years of education has your father or male guardian completed?

47A-0-5 years 47B-6-8 yrs. 47C-1-3 yrs. high school 47D-4 years high school

48F- 1-3 yrs. college 48G-4 yrs. college 48H -5 yrs. or more of college

R. How many years of education has your mother or female guardian completed?

49A-0-5 yrs. 49B-6-8 yrs. 49C-1-3 yrs. high school 49D-4 yrs. high school

50F-1-3 yrs. college 50G-4 yrs college 50H-5 yrs. college or more

Appendix D

TEACHER QUESTIONNAIRE S-179

Name Miss Mr. Mrs. Dr. _____ Identification Number _____
(circle one) Last First Middle Initial

Today's Date _____

Race _____

The following information is being gathered as part of a research project concerned, in part, with the preparation and background of teachers who are teaching eleventh grade United States History. The results will be tabulated electronically and the informants will remain anonymous.

Please complete or check the items listed below. Use the opposite side of the page on any item for which additional space is needed.

1. Degree(s) held and area of specialization

Degree: _____ Major _____

_____ _____

_____ _____

_____ _____

2. Number of years teaching prior to this year _____

3. Number of years with a teaching load of one-half or more courses in social studies _____

4. At what grade level(s) have you had teaching experience?

Elementary ☐ Junior High ☐ Senior High ☐

5. Please list any college courses which you have taken in the Social Sciences and the hours earned (sem., qtr., trimester) since you obtained or renewed your teaching certificate. (Please group according to anthropology, economics, geography, history, political science, psychology, and sociology).

_____

_____

_____

_____

_____

_____

6. Which of the following courses have you taught during your teaching career?

- ☐ American History
- ☐ World History
- ☐ Civics
- ☐ U. S. Government
- ☐ Florida Government
- ☐ Geography
- ☐ Home Economics
- ☐ Business Education (other than typing, shorthand, business machines, or consumer economics)
- ☐ Industrial Arts
- ☐ Consumer Economics
- ☐ Economics (other than consumer)
- ☐ Problems of Democracy
- ☐ Florida History

List any other social studies courses.

_____

7. Which of the following courses are you <u>now</u> teaching in addition to Eleventh grade American History?

- ☐ American History
- ☐ World History
- ☐ Civics
- ☐ U. S. Government
- ☐ Florida Government
- ☐ Geography
- ☐ Home Economics
- ☐ Business Education (other than typing, shorthand, business machines, or consumer economics)
- ☐ Industrial Arts
- ☐ Consumer Economics
- ☐ Economics (other than Consumer)
- ☐ Problems of Democracy
- ☐ Florida History

List any others _____.

8. Is the Americanism v. Communism unit included during the Eleventh grade American History course?

☐ Yes ☐ No

9. What is (are) the title(s) and edition(s) of the textbook(s) you are using with your Eleventh grade U. S. History course?

_____

_____

_____

_____

10. Are your students using the textbook(s) identified in question seven (7) above:

a. in the classroom ☐ Yes ☐ No

b. during study periods ☐ Yes ☐ No

c. at home for study ☐ Yes ☐ No

11. If you use current events or current affairs material regularly, list the title(s) _____

_____

12. Do you or will you have an intern working with you in the American History class which is being tested? 1st semester ☐ Yes ☐ No

2nd semester ☐ Yes ☐ No

13. Have you attended workshops or institutes during the past ten (10) years which were not listed in item 5 above for college credit? ☐ Yes ☐ No

14. Have you attended workshops or institutes during the past five (5) years which were not taken for college credit? ☐ Yes ☐ No

If your answer is yes, please list them by name, location, and approximate date.

_____

_____

_____

_____

_____

_____

15. Which of the following most closely resembles the major category of your father's occupational career? (Please check only one.)

☐ Professional and managerial--these are occupations which require a formal education in well-organized fields of knowledge or a great deal of knowledge or creative talent and skill acquired through experience. Examples are:

architect	clergyman	dentist	lawyer	hotel manager
artist	teacher	physician	judge	restaurant manager
author	editor	pharmacist	draftsman	retail buyer
reporter	chemist	nurse	customs officers	accountant
photographer	engineer	farm owner	military officer	auditor

☐ Sales--these are occupations which involve the sale of a good or service to a buyer and which usually require a training program offered by the employer. High school education is usually a requisite. Examples of items sold are:

insurance	groceries	produce	ice cream
stocks	cosmetics	automobiles	hardware
television sets	pharmaceutical	clothes	newspapers
magazines	advertising	pianos	beverages

☐ Skilled--these occupations require a thorough knowledge of processes, the use of independent judgment, and often involve a high degree of manual dexterity. Skills may be learned through either formal education or an extended apprenticeship. Examples are:

auto mechanic	carpenter	detective	military(non-officer)	watch repairman
welder	type setter	policeman	sheet-metal worker	woodworker
pipe fitter	brick layer	barber	machinist	locomotive engineer
electrician	jeweler	chef	bookkeeper	miller
die maker	baker	fireman	legal secretary	tailor

☐ Semi-skilled--these occupations involving simple, repetitive, and routine jobs which can be learned in a day and mastered in a few weeks. Examples are:

hotel clerk	machine operator	waiter	milkman
ship's steward	hospital attendant	mill-worker	gasoline station attendant
elevator operator	baliff	receiving clerk	packer
truck driver	fisherman	watchman	lineman
switchman	nurseryman	carrier	chauffeur

☐ Unskilled--these are occupations which involve manual operations and which require no special training. Examples are:

bellman	ditch digger	bean picker	deckhand
janitor	stevedore	miner	garbage collector
farm hand	yardman	lumberman	ticket taker
porters			

16. Has your mother ever been in an occupational capacity other than housewife?

☐ Yes ☐ No

If yes, which of the following most clearly resembles her occupational category?

☐ Professional and managerial--these are occupations which require a formal education in well-organized fields of knowledge or a great deal of knowledge or creative talent and skill acquired through experience. Examples are:

architect	clergyman	dentist	lawyer	hotel manager
artist	teacher	physician	judge	restaurant manager
author	editor	pharmacist	draftsman	retail buyer
reporter	chemist	nurse	customs officer	accountant
photographer	engineer	farm owner	military officer	auditor

☐ Sales--these are occupations which involve the sale of a good or service to a buyer and which usually require a training program offered by the employer. High school education is usually a requisite. Examples of items sold are:

insurance	groceries	produce	ice cream
stocks	cosmetics	automobiles	hardware
television sets	pharmaceutical	clothes	newspapers
magazines	advertising	pianos	beverages

☐ Skilled--these occupations require a thorough knowledge of processes, the use of independent judgment, and often involve a high degree of manual dexterity. Skills may be learned through either formal education or an extended apprenticeship. Examples are:

electrician	telegraph operator	chef	legal secretary
beautician	stenographer	bookkeeper	watch repairwoman
policewoman	baker	jeweler	seamstress
painter			

☐ Semi-skilled--these occupations involving simple, repetitive, and routine jobs which can be learned in a day and mastered in a few weeks. Examples are:

telephone operator	waitress	gasoline station attendant
manicurist	short-order cook	elevator operator
truck driver	hotel clerk	shipping clerk
mill worker	hospital attendant	produce packer

☐ Unskilled--these occupations which involve manual operations and which require no special training. Examples are:

charwoman	farm hand
Laundry worker	ticket taker
motel maid	

Appendix E

LIST OF COUNTY PROJECT COORDINATORS

Mr. David E. Meuser, Supervisor of Social Studies, Brevard County Public Schools, 625 New Haven Avenue, Melbourne, Florida

Mr. James Rogers, Supervisor of Social Studies, Broward County Public Schools, 1320 S. W. Fourth Street, Fort Lauderdale, Florida

Mr. Joseph DeChurch, Supervisor of Social Studies, Dade County Public Schools, 1410 N. E. Second Avenue, Miami, Florida

Miss Wilma Simmons, Coordinator of Secondary Social Studies, Duval County Public Schools, 1011 Gilmore Street, Jacksonville, Florida

Mr. M. T. Green, Board of Public Instruction, Escambia County Public Schools, 215 West Garden Street, Pensacola, Florida

Mr. William T. O'Brien, Consultant in Social Studies, Hillsborough County Public Schools, 1407 E. Columbus Drive, Tampa, Florida

Mrs. Drew Tinsley, Curriculum Assistant in Social Studies, Orange County Public Schools, P. O. Box 271, Orlando, Florida

[illegible] J. Brown, Guidance Counselor, Roosevelt High School, [illegible] Avenue, Palm Beach County, West Palm Beach, Florida

Mr. John E. Bennett, Guidance Counselor, Riviera Beach High School, Palm Beach County, P. O. Box 10496, Riviera Beach, Florida

Mr. John M. Ritter, Supervisor of Social Studies, Pinellas County Public Schools, 1960 E. Druid Road, Clearwater, Florida

Miss Rebecca Keith, Coordinator of Secondary Instruction, Polk County Public Schools, P. O. Box 391, Bartow, Florida